

**SOUTH DAYTON LANDFILL
MORaine, MONTGOMERY COUNTY, OHIO
DATA VALIDATION REPORT**

Date: September 12, 2012

Laboratory: Air Toxics Ltd. (Air Toxics), Folsom, California

Laboratory Project #: 1208205

Data Validation Performed By: Lisa Graczyk, Weston Solutions, Inc. (WESTON®) Superfund Technical Assessment and Response Team (START)

Weston Analytical Work Order #/TDD #: 20405.016.008.1869.00/S05-0008-1206-003

This data validation report has been prepared by WESTON START under the START III Region V contract. This report documents the data validation for one air sample collected for the South Dayton Landfill Site that was analyzed for the following parameters and methods.

- Volatile Organic Compounds (VOC) by TO-15
- Methane by ASTM Method D-1946

A level II data package was requested from Air Toxics. The data validation was conducted in general accordance with the U.S. EPA "Contract Laboratory Program National Functional Guidance for Superfund Organic Methods Data Review" dated June 2008. The Attachment contains the results summary sheets with the hand-written qualifiers applied during data validation.

VOCs BY U.S. EPA METHOD TO-15

1. Samples

The following table summarizes the samples for which this data validation is being conducted.

Samples	Lab ID	Matrix	Date Collected	Date Analyzed
1951 Dryden-SS-080712	1208205A-01A	Air	8/7/2012	8/10/2012
2031 Dryden-SS-080712	1208205A-02A	Air	8/7/2012	8/10/2012

2. Holding Times

The samples were analyzed within the required holding time limit of 30 days from sample collection.

3. **Blanks**

A method blank was analyzed with the VOC analysis and was free of target compound contamination above the reporting limit.

4. **Surrogate Results**

The surrogate recovery results were within the laboratory-established quality control (QC) limits.

5. **Continuing Calibration Results**

The continuing calibration results were within the QC limits for percent recovery.

6. **Laboratory Control Sample (LCS) Results**

The LCS and LCS duplicate (LCSD) recoveries were within laboratory QC limits except for as follows. In the LCS and LCSD, chloromethane was detected slightly above the QC limit. Because chloromethane was not detected in the sample, no qualification was required.

7. **Overall Assessment**

The VOC data are acceptable for use based on the information received.

METHANE BY ASTM D-1946

1. Samples

The following table summarizes the samples for which this data validation is being conducted.

Samples	Lab ID	Matrix	Date Collected	Date Analyzed
1951 Dryden-SS-080712	1208205B-01A	Air	8/7/2012	8/9/2012
2031 Dryden-SS-080712	1208205B-02A	Air	8/7/2012	8/9/2012

2. Holding Times

The samples were analyzed within the required holding time limit of 30 days from sample collection.

3. Blanks

A method blank was analyzed with the methane analyses and was free of target compound contamination above the reporting limit.

4. LCS Results

The LCS and LCSD recoveries were within laboratory QC limits.

5. Overall Assessment

The methane data are acceptable for use based on the information received.

Data Validation Report
South Dayton Landfill Site
Air Toxics Ltd.
Laboratory Project #: 1208205

ATTACHMENT

**AIR TOXICS LTD.
RESULTS SUMMARY**



Air Toxics

Client Sample ID: 1951 Dryden-SS-080712

Lab ID#: 1208205A-01A

EPA METHOD TO-15 GC/MS

File Name:	14081013	Date of Collection:	8/7/12 7:20:00 AM
Dil. Factor:	2.12	Date of Analysis:	8/10/12 09:03 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	11	Not Detected	52	Not Detected
Freon 114	11	Not Detected	74	Not Detected
Chloromethane	42	Not Detected	88	Not Detected
Vinyl Chloride	11	Not Detected	27	Not Detected
1,3-Butadiene	11	Not Detected	23	Not Detected
Bromomethane	11	Not Detected	41	Not Detected
Chloroethane	42	Not Detected	110	Not Detected
Freon 11	11	Not Detected	60	Not Detected
Ethanol	42	Not Detected	80	Not Detected
Freon 113	11	Not Detected	81	Not Detected
1,1-Dichloroethene	11	Not Detected	42	Not Detected
Acetone	42	Not Detected	100	Not Detected
2-Propanol	42	Not Detected	100	Not Detected
Carbon Disulfide	11	Not Detected	33	Not Detected
3-Chloropropene	42	Not Detected	130	Not Detected
Methylene Chloride	11	Not Detected	37	Not Detected
Methyl tert-butyl ether	11	Not Detected	38	Not Detected
trans-1,2-Dichloroethene	11	23	42	90
Hexane	11	Not Detected	37	Not Detected
1,1-Dichloroethane	11	Not Detected	43	Not Detected
2-Butanone (Methyl Ethyl Ketone)	42	Not Detected	120	Not Detected
cis-1,2-Dichloroethene	11	52	42	210
Tetrahydrofuran	11	Not Detected	31	Not Detected
Chloroform	11	30	52	150
1,1,1-Trichloroethane	11	Not Detected	58	Not Detected
Cyclohexane	11	Not Detected	36	Not Detected
Carbon Tetrachloride	11	Not Detected	67	Not Detected
2,2,4-Trimethylpentane	11	Not Detected	50	Not Detected
Benzene	11	Not Detected	34	Not Detected
1,2-Dichloroethane	11	Not Detected	43	Not Detected
Heptane	11	Not Detected	43	Not Detected
Trichloroethene	11	2900	57	16000
1,2-Dichloropropane	11	Not Detected	49	Not Detected
1,4-Dioxane	42	Not Detected	150	Not Detected
Bromodichloromethane	11	Not Detected	71	Not Detected
cis-1,3-Dichloropropene	11	Not Detected	48	Not Detected
4-Methyl-2-pentanone	11	Not Detected	43	Not Detected
Toluene	11	Not Detected	40	Not Detected
trans-1,3-Dichloropropene	11	Not Detected	48	Not Detected
1,1,2-Trichloroethane	11	Not Detected	58	Not Detected
Tetrachloroethene	11	18	72	120
2-Hexanone	42	Not Detected	170	Not Detected



Air Toxics

Client Sample ID: 1951 Dryden-SS-080712

Lab ID#: 1208205A-01A

EPA METHOD TO-15 GC/MS

File Name:	14081013	Date of Collection: 8/7/12 7:20:00 AM
Dil. Factor:	2.12	Date of Analysis: 8/10/12 09:03 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	11	Not Detected	90	Not Detected
1,2-Dibromoethane (EDB)	11	Not Detected	81	Not Detected
Chlorobenzene	11	Not Detected	49	Not Detected
Ethyl Benzene	11	Not Detected	46	Not Detected
m,p-Xylene	11	Not Detected	46	Not Detected
o-Xylene	11	Not Detected	46	Not Detected
Styrene	11	Not Detected	45	Not Detected
Bromoform	11	Not Detected	110	Not Detected
Cumene	11	Not Detected	52	Not Detected
1,1,2,2-Tetrachloroethane	11	Not Detected	73	Not Detected
Propylbenzene	11	Not Detected	52	Not Detected
4-Ethyltoluene	11	Not Detected	52	Not Detected
1,3,5-Trimethylbenzene	11	Not Detected	52	Not Detected
1,2,4-Trimethylbenzene	11	Not Detected	52	Not Detected
1,3-Dichlorobenzene	11	Not Detected	64	Not Detected
1,4-Dichlorobenzene	11	Not Detected	64	Not Detected
alpha-Chlorotoluene	11	Not Detected	55	Not Detected
1,2-Dichlorobenzene	11	Not Detected	64	Not Detected
1,2,4-Trichlorobenzene	42	Not Detected	310	Not Detected
Hexachlorobutadiene	42	Not Detected	450	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	117	70-130
Toluene-d8	105	70-130
4-Bromofluorobenzene	94	70-130



Air Toxics

Client Sample ID: 2031 Dryden-SS-080712

Lab ID#: 1208205A-02A

EPA METHOD TO-15 GC/MS

File Name:	14081014	Date of Collection:	8/7/12 11:15:00 AM
Dil. Factor:	7.00	Date of Analysis:	8/10/12 09:29 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 12	35	Not Detected	170	Not Detected
Freon 114	35	Not Detected	240	Not Detected
Chloromethane	140	Not Detected	290	Not Detected
Vinyl Chloride	35	2600	89	6700
1,3-Butadiene	35	Not Detected	77	Not Detected
Bromomethane	35	Not Detected	140	Not Detected
Chloroethane	140	Not Detected	370	Not Detected
Freon 11	35	Not Detected	200	Not Detected
Ethanol	140	Not Detected	260	Not Detected
Freon 113	35	Not Detected	270	Not Detected
1,1-Dichloroethene	35	94	140	370
Acetone	140	Not Detected	330	Not Detected
2-Propanol	140	Not Detected	340	Not Detected
Carbon Disulfide	35	180	110	570
3-Chloropropene	140	Not Detected	440	Not Detected
Methylene Chloride	35	Not Detected	120	Not Detected
Methyl tert-butyl ether	35	Not Detected	130	Not Detected
trans-1,2-Dichloroethene	35	750	140	3000
Hexane	35	3500	120	12000
1,1-Dichloroethane	35	Not Detected	140	Not Detected
2-Butanone (Methyl Ethyl Ketone)	140	Not Detected	410	Not Detected
cis-1,2-Dichloroethene	35	27000	140	110000
Tetrahydrofuran	35	Not Detected	100	Not Detected
Chloroform	35	Not Detected	170	Not Detected
1,1,1-Trichloroethane	35	Not Detected	190	Not Detected
Cyclohexane	35	5000	120	17000
Carbon Tetrachloride	35	Not Detected	220	Not Detected
2,2,4-Trimethylpentane	35	Not Detected	160	Not Detected
Benzene	35	540	110	1700
1,2-Dichloroethane	35	Not Detected	140	Not Detected
Heptane	35	9200	140	38000
Trichloroethene	35	460	190	2400
1,2-Dichloropropane	35	Not Detected	160	Not Detected
1,4-Dioxane	140	Not Detected	500	Not Detected
Bromodichloromethane	35	Not Detected	230	Not Detected
cis-1,3-Dichloropropene	35	Not Detected	160	Not Detected
4-Methyl-2-pentanone	35	Not Detected	140	Not Detected
Toluene	35	7900	130	30000
trans-1,3-Dichloropropene	35	Not Detected	160	Not Detected
1,1,2-Trichloroethane	35	Not Detected	190	Not Detected
Tetrachloroethene	35	Not Detected	240	Not Detected
2-Hexanone	140	Not Detected	570	Not Detected



Air Toxics

Client Sample ID: 2031 Dryden-SS-080712

Lab ID#: 1208205A-02A

EPA METHOD TO-15 GC/MS

File Name:	14081014	Date of Collection: 8/7/12 11:15:00 AM
Dil. Factor:	7.00	Date of Analysis: 8/10/12 09:29 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	35	Not Detected	300	Not Detected
1,2-Dibromoethane (EDB)	35	Not Detected	270	Not Detected
Chlorobenzene	35	1600	160	7600
Ethyl Benzene	35	830	150	3600
m,p-Xylene	35	2100	150	9100
o-Xylene	35	2000	150	8800
Styrene	35	Not Detected	150	Not Detected
Bromoform	35	Not Detected	360	Not Detected
Cumene	35	380	170	1900
1,1,2,2-Tetrachloroethane	35	Not Detected	240	Not Detected
Propylbenzene	35	470	170	2300
4-Ethyltoluene	35	1300	170	6600
1,3,5-Trimethylbenzene	35	1600	170	7800
1,2,4-Trimethylbenzene	35	2000	170	9700
1,3-Dichlorobenzene	35	Not Detected	210	Not Detected
1,4-Dichlorobenzene	35	Not Detected	210	Not Detected
alpha-Chlorotoluene	35	Not Detected	180	Not Detected
1,2-Dichlorobenzene	35	Not Detected	210	Not Detected
1,2,4-Trichlorobenzene	140	Not Detected	1000	Not Detected
Hexachlorobutadiene	140	Not Detected	1500	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	126	70-130
Toluene-d8	112	70-130
4-Bromofluorobenzene	93	70-130

Client Sample ID: 1951 Dryden-SS-080712

Lab ID#: 1208205B-01A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9080923	Date of Collection: 8/7/12 7:20:00 AM
Dil. Factor:	2.12	Date of Analysis: 8/9/12 08:13 PM

Compound	Rpt. Limit (%)	Amount (%)
Methane	0.00021	0.00037

Container Type: 6 Liter Summa Canister

Client Sample ID: 2031 Dryden-SS-080712

Lab ID#: 1208205B-02A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	9080924	Date of Collection: 8/7/12 11:15:00 AM
Dil. Factor:	1.75	Date of Analysis: 8/9/12 08:35 PM

Compound	Rpt. Limit (%)	Amount (%)
Methane	0.00018	2.2

Container Type: 6 Liter Summa Canister